Zig Zag Education

Economics AS / A Level | AQA | 7135/7136

Topic Tests for AS / A Level Year 1 AQA

Microeconomics

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Contents

Teacher's Introduction

This resource consists of a set of Topic Tests that have been written to support the teaching of A Level AQA Year 1 Microeconomics. It allows teachers and students to check their understanding and consolidate knowledge of each part of the AQA specification. In each Topic Test there is a mixture of numerical, multiple-choice, short-answer and essay-style questions of a variety of different difficulties. There are 9 Topic Tests in this resource, following the topics of the A Level specifications.

Importantly, each Topic Test is accompanied by a set of detailed answers that could be handed out to students as a basis for 'model' answers in the examination. Note that although the Topic Test questions aren't always in exam format, the questions within have been written carefully with the intention of testing the range of Assessment Objectives and often borrow aspects that are similar to those in the exam.

Most of the case studies in the Topic Tests include up-to-date economic data and scenarios that should place economic theory in recent history, enrich students' general knowledge of the subject, and prepare students for the Data Response aspects of the examination. Moreover, the resource also includes plenty of opportunities for students to practise the Quantitative Skills outlined in the Appendix of the AQA specification.

Most Topic Tests contain 30–40 marks worth of questions, although some tests are shorter to cover each specification topic appropriately according to its scope. It is intended that the longer Topic Tests will take about one hour to complete and should be presented to students *after* teaching the parts of the specification that are to be tested. However, the Topic Tests could also be given to students as homework in order to consolidate their knowledge outside of the classroom, or certain aspects could be used as a supplement to in-class learning.

It is important to note that this resource should be used as a complement to other resources such as textbooks and practice exam papers, and not in isolation. These Topic Tests include plenty of explanation of the theory in the mark scheme, but students should be encouraged to access information as widely as possible.

Terminology note
Where the AQA specification used specific terminology we have followed their example. However, there are some terms that students may not have necessarily come across:

- Ceteris paribus, the Latin term meaning 'all other things being equal', we have judged to be implied by the specification, and worth testing at this level.
- The AQA specification refers to 'production possibility diagrams' and 'boundaries'. Here we have used the term 'production possibility curve' (students may also come across 'frontier').
- The answers occasionally refer to MPB, MSC, MPC, etc. – matching these to D and S curves where appropriate. This is beyond the AS specification, so if you are teaching the AS only, or teaching the A Level in a co-teachable order, and you are giving these answers out for self-marking, please make sure students are aware that the concept of the margin is only on the A Level specification.

It is hoped that this resource, as well as offering support for teaching the essential elements of the AQA microeconomics specification, will help students fully prepare for their A Level examinations. The economic environment is constantly in flux, and full of fascinating current issues. This resource attempts to share some of these current issues as a basis for teaching in the most interesting way possible, meanwhile encouraging further study from the next generation of Economists!

Happy teaching! *October 2019*

Mark Breakdown Test-by-test

Topic Test	
4.1.1	
4.1.3.1–2	
4.1.3.3–4	
4.1.3.5–6	
4.1.4	
4.1.8	
4.1.8.1–3	
4.1.8.4–6	
4.1.8.8–9	

4.1.5 Competitive and Concentrated Markets

1. In Economics, we typically assume firms are aiming to maximise profits. Expla
maximisation objective and why a firm might choose that objective.

2. Explain what is meant by a *perfectly competitive* market.

3. Explain what is meant by 'barriers to entry'.

4. Table 1 shows data on the UK's supermarket industry.

Table 1

Supermarket	Market Share
Tesco	27.6%
Sainsbury's	16.1%
Asda	15.7%
Morrisons	10.4%
Co-op	6.1%
Aldi	6.8%

Calculate the 3-firm concentration ratio.

It is fairly rare to find a market that is a 'pure' monopoly according to the strict
frequently we hear of firms exerting their 'monopoly power'. In August 2015, Tu
acquired the rights to the drug Daraprim, which is sometimes used to treat malar
price of the drug from $13.50 to $750 overnight, an almost 5,500% increase. T
been accused of abusing its monopoly power to the detriment of healthcare syst
patients internationally.

5 Explain the factors that influence the degree of monopoly power in an indus

6. Evaluate **one** advantage and **one** disadvantage of a monopoly.

4.1.8.1–3 The Market Mechanism

1. Explain the role of the price mechanism in a market-based economy.

2. Explain **one** advantage and **one** disadvantage of the price mechanism.

3. What is meant by market failure?

4. If market failure occurs, will pr[illegible] efficient or inefficient? Why?

5. Market fail[illegible]
   A Th[illegible]-production of certain products.
   B Th[illegible]er-production of certain products.
   C The over-consumption of some products and under-consumption of oth
   D All of the above.

> Tourists to the UK's national parks tend to leave more than just their footprints in intentionally or accidentally, leave behind all sorts of waste – from plastic food nappies. Litter is unsightly, and it ruins other people's enjoyment of the beautiful to offer. It's easy to think that a single piece of litter is not a significant problem, quickly turn our national parks into large-scale rubbish dumps.

6. Illustrate, and explain, how leaving litter behind can cause a market failure.

7. Explain the difference between *complete* and *partial* m[illegible]ket failure.

8. What is meant by a 'public good'?

9. Identify which of the fo[illegible] public goods.

([illegible])	Cinemas
(b)	Healthcare
(c)	Air
(d)	Bananas
(e)	Lighthouses
(f)	Timber
(g)	Fireworks
(h)	Electricity

10. 'Excludability' refers to which of the following concepts?
    A It is possible to prevent people that haven't paid f[illegible] the good from cons to it.
    B It is impossible for two individuals [illegible]o[illegible]me the good simultaneously.
    C It is possible to reject th[illegible]m[illegible]tion of the good when it is provided p
    D It is possible for t[illegible]uals to consume the good simultaneously.

11. What i[illegible]t by the non-rivalry of a public good?

12. (a) If something is non-rejectable, what is true of this type of good?
    (b) State **two** examples of a good that is non-rejectable.

13. Quasi-public goods – meaning 'almost' public goods – are goods that are eith
or non-rivalrous but excludable.

(a) Identify and explain an example of each type of quasi-public good.
(b) Do you think market failure could still occur in the case of a quasi-public

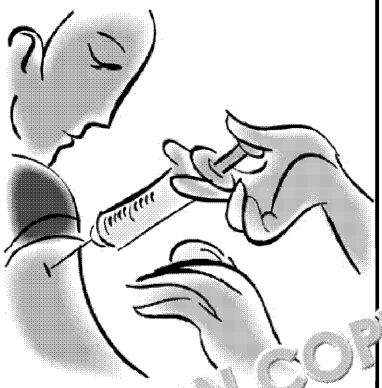
14. Explain, using one or more examples, how technological change can alter the

It should be of no surprise that [illegible]ference is an important talking point in
hear of measures that [illegible]ndertaken by governments to improve the secu
intelligence [illegible]e NSA, for instance, is a controversial agency that mo
informa[illegible]he communication of American citizens in order to protect agains
security. [illegible], in the UK, is a nuclear submarine defence system that some peo
protecting the UK. However, systems of national defence are public goods in the
that access to defence by one civilian doesn't prevent another from being simulta
Moreover, people don't have a choice in whether they're defended or not once
course, people can object to government spending on national defence, but this
same as a rejection of the good itself. Finally, it's impossible to exclude certain p
defence. If the defence system prevents attacks on a national scale then people
whether they've paid into the system or not. It would not be credible for a gover
defending certain individuals in society.

15. Evaluate the case for government provision of a national defence system.

4.1.8.4–6 Positive and Negative Externalities in Consum

1. Identify which type of externality each of the following images represents.

(a) (Industrial pollution)		(c) (Smoking)
(b) (Vaccinations)		(d) (R&D)

Imagine [redacted] – the Korean electronics manufacturer – enters a region ir tech proc[redacted] plant. It invests heavily in training the local workforce in modern provides additional voluntary training for those that wish to specialise in highly s Samsung's investment in education and training has advantages for other manuf they're able to employ pre-trained workers from Samsung. Moreover, Samsung' training has far-reaching benefits for society as a whole because a more produc to economic growth and social cohesion.

2. Using information from the extract above and a diagram, explain the externa

3. Explain the reason why the classification of a 'merit' good depends on a valu

4. Using information from the extract and a suitable diagram, evaluate whether considered a demerit good.

5. (a) What is meant by a 'demerit go[redacted]'
   (b) What role does inform[redacted] play in existence of demerit goods?

6. 'Homo [redacted] the 'economic human', is traditionally assumed to make perfect[redacted]ation.

   Explain, using an appropriate example, how imperfect information can affect

7. (a) Explain what is meant by geographical immobility of labour.
   (b) Explain how immobility of factors of production can lead to market failu

4.1.8.9–10 Government Intervention and Government F

1. What is the rationale for government intervention in markets?

2. Identify a potential government intervention method that could be effective following scenarios.

	Scenario
(a)	Fossil-fuel-powered automobiles were a necessity in past decades, that means electric-powered vehicles are affordable and less envir their fossil-fuel counterparts. However, less people are purchasing than the government had hoped.
(b)	Infrastructure is essential to the functioning of any economy. Witho transportation networks, we would only be able to purchase things incredibly close to one's home. However, it is difficult for private firm providing certain transportation networks because they often functi
(c)	Agricultural commodities tend to fluctuate in price according to th much of a crop is harvested, there will be an excess of supply and t crop would be less than expected, and vice versa. However, farme future prices of their crops leads them to delay investments that c
(d)	In the second half of the twentieth century, many Asian economie international trade and have seen dramatic increases in their rates although the macroeconomy is generally performing well in these workers are being paid nominal wages for their labour. In Banglad factory workers take home about £25 per month, but their living c £45 per month.
(e)	Weapons are instruments of death. While it's morally acceptable f access to weapons, weapons in the hands of the wrong people are 1966, Charles Whitman climbed to the top of the University of Tex aim at innocent university students with a high-powered sniper rifl However, since this incident there have been numerous high-scho across the US and the country's homicide rate is the highest of an
(f)	Consumers, unaware of the serious health risks of consuming agric often treated with synthetic pesticides, have been over-consuming contain carcinogens and cancer rates are increasing in the UK.

Pollution has reached a record high in the UK. The UK government feels that ther renewable energy sources. Households could benefit from installing solar panels could bring down the cost of their electricity bills in an environment where the tr continually increasing tariffs. However, there are external benefits of household including reductions in pollution and sustainability for future generations. The UK give cash-in-hand subsidies for households that wish to install solar panels on the

3. (a) Illustrate the market failure that is outlined in the extract.
   (b) Analyse the likely effect of the government's intervention on the market
   (c) What is the opportunity cost of the government intervention?
   (d) Identify an alternative way the government could intervene to increase energy sources.

4. 'Alcoholism has many negative effects on society. Therefore, the government shou price per unit of alcohol.'

   Evaluate the effectiveness of minimum unit prices as a method to counteract

5. What is meant by 'government failure'?

6. Identify and explain **three** possible causes of government failure.

Answers

4.1.1 Economic Methodology and the Economic Proble

1. A 'social' science is an academic discipline which focuses on the scientific study of s

   [2 marks for a clear explanation of what is meant by a 's… science'; 1 mark for a … which conveys the general meaning]

2. A 'natural' scientist is able to co… ex…iments in order to test their hypothes… unable to conduct experi… would not be possible for an economist to char… its effect on the … Instead, an economist creates a model and tests chang…

   [2 mark… clear explanation of the difference between an economist and a natu… explanation that is less clear but which conveys the general meaning]

3. **A** – Only 'A' is an example of a positive statement because it is a testable statemen… involve some value judgements about how things ought to be and so are normati…

   [1 mark for correct answer]

4. The government's policy decision to pursue an inflation rate of 2.0% is an examp… statement and involves an implicit value judgement of what the UK's inflation rat…

   [2 marks for a clear explanation of how the government's policy involves a value ju… explanation that is less clear but which conveys the general meaning]

5. **B** – The central purpose of economic activity is the production of goods and servi… and needs. Note that economics *is* concerned about the mi…misation of excess pr… 'economise') but it is not the central purpose of ec… …activity.

   [1 mark for correct response]

6. 1. What should ba… …d…?
   2. Ho… …ul… …roduced?
   3. Fo… …n should it be produced?

   [1 mark per correct response]

7. (a) The four factors of production are: *land*, *labour*, *capital*, and *entrepreneurshi…*

   [1 mark for each correctly identified factor of production]

   (b) Land's reward is rent – the return for ownership of land and natural resour… the return on time invested in productive activity. Capital's reward is intere… Finally, entrepreneurships reward is profit – the return for risk.

   [1 mark for each correctly identified reward to the factors of production]

8. The 'economic problem' refers to the situation that ari… …which an economy's … therefore, insufficient in being able to satisfy th… …number of wants of ecor… referred to as the problem of 'scarcity'.

   [2 marks for clear expla… …of the BEP – answer should include the idea of unlim… resources, whet… …ng explicitly or implicitly to scarcity]

9. **B** – Eco… …s make assumptions in order to simplify their models. It would be … all the different factors that could affect an economic model, and, even if they cou… constant change. Therefore, instead of taking into account everything, economist… that are *generally* true, and can build models of the economy that are true on ave…

   [1 mark for correct response]

10. 'Ceteris paribus' is a Latin phrase that translates as 'other things being equal' or '
constant'. It would be almost impossible for economists to analyse a specific char
macroeconomic environment without having to consider that other factors could
Therefore, in order to isolate the effect of a single factor, economists tend to adop
– e.g. if investment increases, aggregate demand will increase, ceteris paribus.

*[2 marks for a clear explanation of the significance of the ceteris paribus assumptio
for an explanation that is less clear but which conveys the general meaning]*

11. Scarcity forces economic agents to make choices because the nature of having fin
set of *wants* can be satisfied. Necessarily using our resources for the consumptio
using those same resources for something else. Agents consider their limited reso
basket of goods they would like to consume. Individuals, therefore, must prioritis
import the first – often their 'needs' – and then make choices about which
scarcity did not exist then people would never be forced to make choices about p
Economics wouldn't exist as a subject.

*[2 marks for a clear explanation of how scarcity forces choices to be made – i.e. ina
limited set of resources]*

12. An 'opportunity cost' is the value of the *next-best alternative forgone* arising from
course of action. Whenever we decide to pursue some action– e.g. studying Econ
the benefits that would have arisen from all other possible decisions – e.g. studyi
Maths at university, but also other options such as seeking employment instead.
a decision is <u>only</u> the benefit that would have arisen from the 'next-best' option.

*[2 marks for clear definition of an opportunity cost – the idea of a value placed on t
central to the definition, and the idea that all decisions involve a trade-off but only
to an opportunity cost]*

13. The production possibility curve (PPC), or frontier (PPF), is a graphical represen
combination of goods and services (e.g. consumer and capital goods, apples and
within a given time period by employing an economy's fixed factors of productio

[2 marks for any clear definition of the PPC]

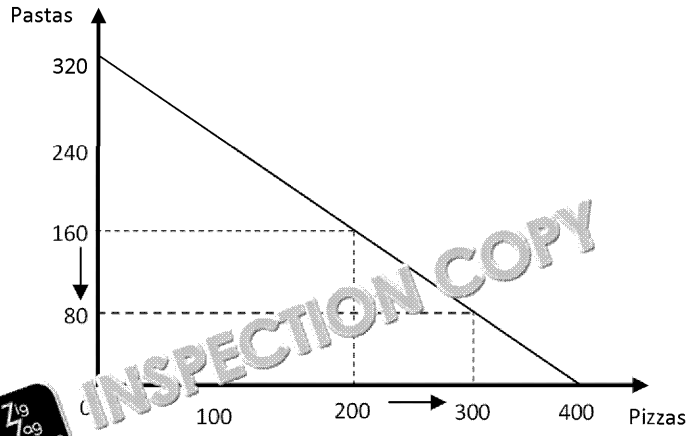
14. The PPC will shift whenever the productive potential of an economy improves. If a n
could increase the amount of output given an economy's inputs, we would see th
would hold for investments in similar capital goods. Likewise, the PPC could shift
increase – e.g. if a large oil reserve was found. However, anything that damages t
economy leads the PPC to shift inward – e.g. a civil war, or natural disaster.

*[1 mark for identifying factors causing an outward shift in the PPC – anything that
of an economy; 1 mark for identifying factors causing the PPC to shift inward – any
potential of an economy]*

15. A, B, and C are all productively efficient because they are all situated on the produ
Remember, the PPF shows the combination of two products that could be produc
are *fully* and *efficiently* employed. Therefore, A, B and C are productively efficient
something is allocatively efficient depends ultimately on whether the combinatio
people's preferences. Thus, either A, B or C could be allocatively efficient, but this
judgements about the desirability of the combination of output.

*[2 marks for a clear explanation of the difference between productive and allocativ
for an explanation that is less clear but which conveys the general meaning]*

16. (a)



[1 mark for correctly labelled axes and values, 1 mark for linear PPC, and 1 m production trade-off is not one-for-one. Note that students can label the y-axis vice versa), but the slope must show the relative productive capacity in favour

(b) (i) Scarcity is represented via any point *outside* of the PPC for this econom represents the production combinations that would be possible given t production, and so points outside of this space represent the unlimited given limited resources.

(ii) Productive efficiency is represented via any point *along* the PPC – this i utilising its available resources along this curve, it would not be possib the curve shows the 'maximum combinations' of output.

(iii) Inefficiency is represented via any point *inside* the PPC – this is becaus possible to produce more of one good without sacrificing any of the oth resources are being inefficiently under-u...

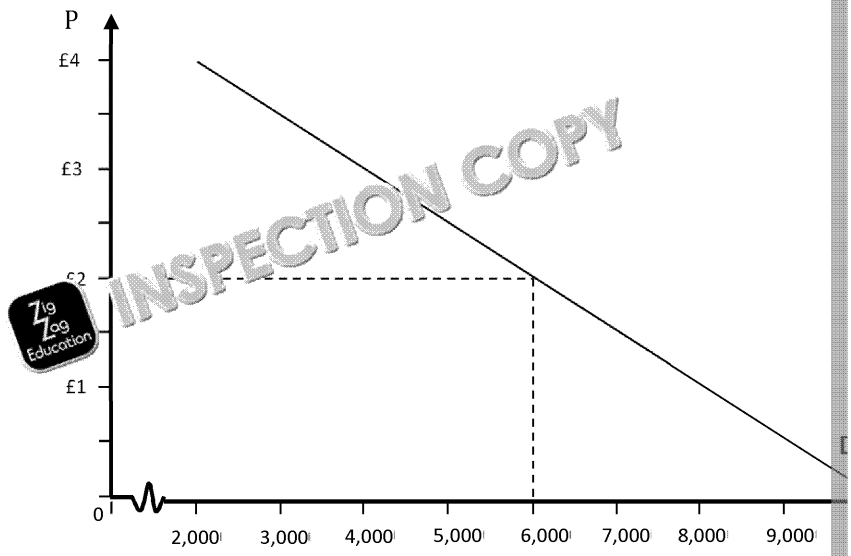
[1 mark each for correctly i... these concepts on the PPC]

(c) 80 pastas – rati... a ... nctional economy decided to produce 100 more mo... nt ... PPC as the economy is now using more of its resources al... PPC involve a *trade-off* between the production of pastas and the pr... 100 more pizzas, the benefit of producing 80 pastas must be forgon of producing an additional 100 pizzas is 80 pastas.

[1 mark for correct answer]

4.1.3.1–2 Demand

1. (a)



[1 mark for correctly labelled axes and demand curve; 1 mark for downward-slopi passing through the coordinates in Table 1]

(b) $\%\text{ Change in } Q_D = \frac{\text{Original } Q_D}{\text{New } Q_D} \times 100 = \frac{4{,}000}{8{,}000} \times 100 = 50\%$

[1 mark for correct answer; 1 additional mark for working]

2. Intuitively, it seems obvious that demand should be do ard-sloping. Whenev would expect the quantity demand of such an it o low, and vice versa. Hen between price and quantity of product. W demand is subject to a 'real i higher the price of an item the le l' ome a consumer would have after pu reduce disposable incom refe e, we would expect demand to be less at high 'substitution' effect in the price of a certain good would encourage co produc s, nd for an item is lower the higher its price.

[1 mark for stating each effect that explains the inverse relationship between price substitution effect) and 1 mark for explanation of each]

3. Possible factors shifting the demand curve for Kopi Luwak coffee could include a (it is likely to be a *normal* good), an increase in the price of a substitute good (e.g. the price of a complement good (e.g. milk), and a general shift in consumer prefe (because of advertising, due to a health trend, etc.).

[Maximum 3 marks. 1 mark for each suitable factor that could shift the demand cu shift in either direction are appropriate. Do not award marks for changes in the pri

4. (a) Price elasticity of demand (PED) is the sensitivity, or responsiveness, of de service's price level.

[2 marks for a clear explanation of PED; 1 mar fo n explanation that is less general meaning]

(b) $\text{PED} = \frac{\%\text{ Change in th ity D nanded}}{\%\text{ e in e Price}}$

[2 for correct formula for PED; award only 1 mark if formula is defined per ntage change; no marks if numerator and denominator are opposite to v

5. (a) **C** – $\text{PED} = \frac{\text{\% Change in the Quantity Demanded}}{\text{\% Change in the Price}} = \frac{-10\%}{40\%} = -0.25$

Therefore, the PED of petrol is inelastic. PED is *inelastic* if the calculated val
absolute terms), it is perfectly inelastic if PED=0. Conversely, PED is elastic i
PED=1.

[1 mark for correct response]

(b) **A** – Increase.

[1 mark for correct re[illegible] sel

6. (a) In[illegible]la[illegible] of demand (YED) is the sensitivity, or responsiveness, of d
co[illegible] income.

*[2 marks for a clear explanation of YED; 1 mark for an explanation that is less
general meaning]*

(b) $\text{YED} = \frac{\text{\% Change in the Quantity Demanded}}{\text{\% Change in Income}} = \frac{-60\%}{15\%} = -4.00$ (i.e. Spam is an 'inferio

[1 mark for correct answer; 1 mark for showing working]

7. (a) Cross elasticity of demand (XED) is the sensitivity, or responsiveness, of der
in response to a change in some other good or service's price level.

*[2 marks for a clear explanation of XED; 1 mark for an explanation that is less
general meaning]*

(b) $\text{XED} = \frac{\text{\% Change in the Quantity Demanded of Good X}}{\text{\% Change in the Price of Good Y}}$

*[2 marks for correct formula fo[illegible] ED [illegible]ard only 1 mark if formula is defined
percentage change; no [illegible]rks [illegible]umerator and denominator are opposite to v*

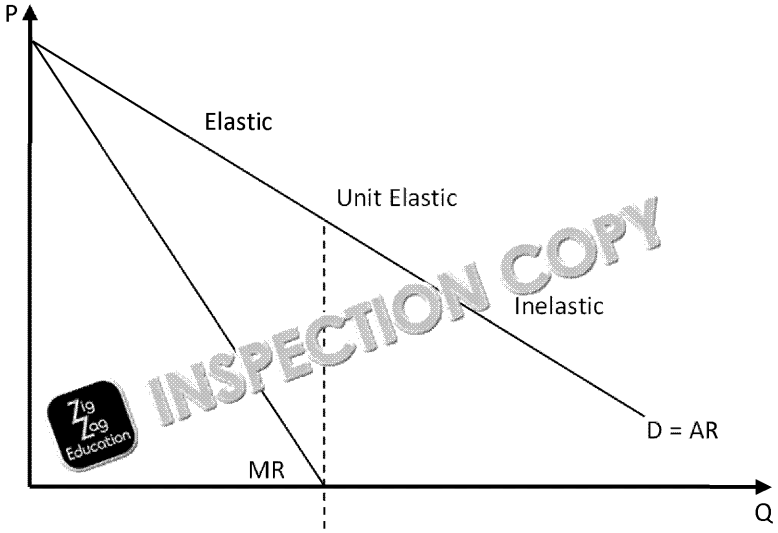
8. 'Inferior[illegible]ds [illegible]e goods whose YED is negative – that is, when incomes ri
propor[illegible]y less on the good. Inferior goods have YED < 0. Inferior goods, for
discoun[illegible]ded food. 'Normal' goods are goods that show a positive relationshi
consumption – most goods tend to be described as normal goods. Normal goods
Thus, normal goods have a YED > 0.

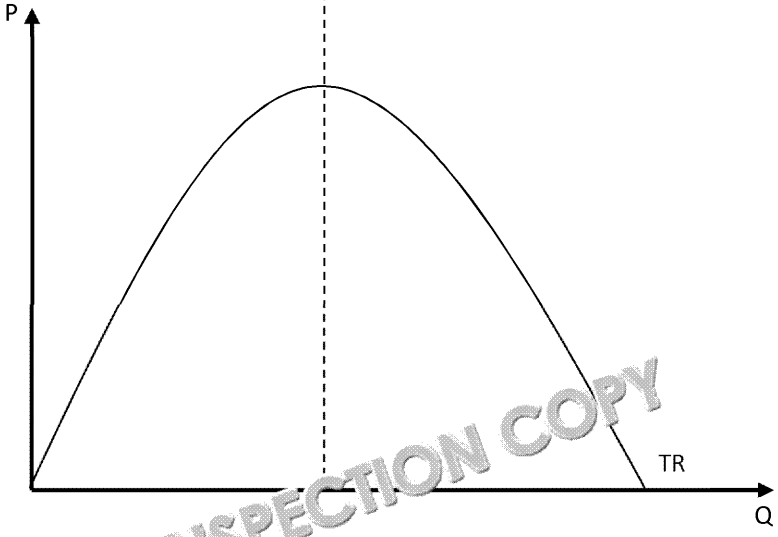
*[Up to 2 marks for an accurate description of an inferior and a normal good; up to
these goods – e.g. by using values of YED, examples, etc.]*

9. **A** – Coal and BBQs are said to be complements if they have an XED of -0.54. This i
price of coal leads to a decrease in the consumption of BBQs. Note that this relati
is an option for the fuel for a BBQ.

[1 mark for correct response]

10.





Notice th[illegible] price elasticity of demand varies along a straight line demand cur[illegible] half of [illegible] curve the price is *high*, while the quantity demanded *low*, so a *percent*[illegible]ms, but the associated change in quantity demanded would be larg[illegible] upper half of the demand curve is elastic, and the bottom half inelastic. Note that[illegible] curve the price elasticity of demand will be *unit-elastic.*

If demand is price elastic, the firm can reduce its price but enjoy a disproportiona[illegible] increase its revenue. If demand is price inelastic, the firm can increase its price a[illegible] increase its revenue. However, once demand is unit elastic, an increase or decrea[illegible] decrease total revenue. Hence, total revenue is maximised when price and quanti[illegible] unit elasticity. Notice that this is also the point at which marginal revenue is zero[illegible] would lead to *negative* marginal revenue and so total revenue would decrease, a[illegible] point would also reduce total revenue because the marginal revenue of increasin[illegible]

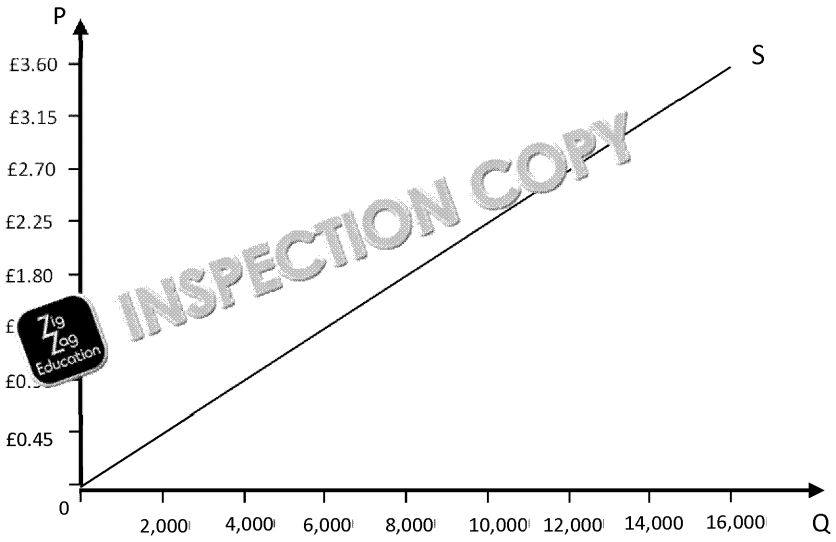
[Maximum 4 marks. 2 marks for explaining the relationship between a firm's PED a[illegible] relationship with a diagram.]

11. PED is influenced by…
    - *Availability of Substitutes:* If there are suitable subs[illegible]s available for a prod[illegible] be more elastic. Explanation of this relation[illegible] is that an increase in the price shift their consumption away from it[illegible] the relatively cheaper good, thu[illegible] price increase. However, the [illegible]it[illegible] of elasticity will depend on how close
    - *Necessity:* If a product [illegible] necessity then an increase in the price of the item the demand. T[illegible] items that are not thought of as necessities (e.g. fore[illegible] m[illegible] changes in price because there are alternatives available.
    - *P[illegible]n of Income Devoted to the Good:* If the cost of an item constitutes a hig[illegible] ov[illegible]penditure, then a small increase in its price is likely to have a large eff[illegible] income effect of consumption – that is, items that take up a larger share of our d[illegible]
    - *Time Period:* In the short-run, demand tends to be inelastic because people ha[illegible] commitments to consumption, and so changes in price don't tend to affect de[illegible] people have time to change their patterns of consumption in response to price

[1 mark each for identify an appropriate factor; 1 mark each for suitable explanati[illegible]

4.1.3.3–4 Supply

1. (a)



[1 mark for correctly labelled axes and supply curve; 1 mark for upward-slopi passing through the coordinates in Table 1]

(b) Supply is upward-sloping and directly proportional to price, meaning that t between price and quantity.

[1 mark for correct observation]

2. It is suggested that supply is upward-sloping for the fo g reasons. First, if th implies that it is more profitable for a business to s products. Therefore, fir *expand* their output – that is, they sup e to the market when the price is hi production expands the *marg* production tends to increase because of Therefore, at greater l put, prices need to be higher to mitigate the hig relationshi bet e and quantity supplied is reflected by movements *alo*

[1 mark ntifying each reason; 1 mark for each explanation]

3.

(a)	Assuming that the West Country orchard's business objective is profi changes its cost structure will have an effect on the supply curve. Her that is more efficient than the manual human labour used in the past. this technology is to reduce the unit costs of production by reducing l curve for the West Country orchard shifts rightwards (outwards) – be they are prepared to provide more at any given price.
(b)	Subsidies are grants from the government that are designed to increa a subsidy this essentially offsets their costs of production. Again, this West Country orchard will be able to provide a greater quantity of ou orchard's supply curve will shift rightward (outwards). (Note, it shift between the old and new supply curve is th unt of the subsidy.)
(c)	If the price of pears increases relati e t price of apples the West switch production to pear because pears are currently more farming techniqu agricultural products are more or less e goods are ve supply (substitutes). Hence, we can expect t wa price of a competitive good increases. (Note, an evaluati es long time to grow a pear tree, so the West Country orchard ar r production in the short-run.)
(d)	Increases in the National Living Wage constitute an increase in the co Country orchard. Even if this firm doesn't hire anybody that is earnin increase in it causes upward pressure on *all* wages. Whenever a busi supply less at any given price because it is less profitable to do so tha Country orchard's supply curve would shift inward if this change occ

(e)	If bio-fuel made from by-products of the orchard's production process are fetching a high price, the effect on the orchard's supply curve could go either way. First, they might stop supplying whole apples altogether and supply bio-fuel instead leading to an inward shift of the supply curve. However, they might also increase the production of apples and just sell their by-products to firms cre is ambiguous.

Knowledge (3), application (3) and analysis (3)		
	0	No relevant answer given.
Level 1	**1–3**	A few concepts may be identified correctly, but inconsistently, and with inaccu thought behind the causes and effects.
Level 2	**4–6**	Some knowledge of economic concepts is shown, partially linked to the questi reasoning skills, but may focus too much on one sid n argument.
Level 3	**7–9**	Knowledge of the economic concepts is ve ac te. Links to the question ar relevant examples. Analysis is w ed and logical, and appropriate for t
Evaluation (6)		
	0	No ev ua
Level 1	**1–2**	L ttempt at evaluation – may be only loosely related to the question, o su t reasoning.
Level 2	**3–4**	Clear evidence of evaluative comments, though they may be unfairly weighted argument. Reasoning / supporting evidence is provided but may be incomplet
Level 3	**5–6**	Accurate, balanced evaluative comments are made, supporting a rounded co pertains directly to the question.

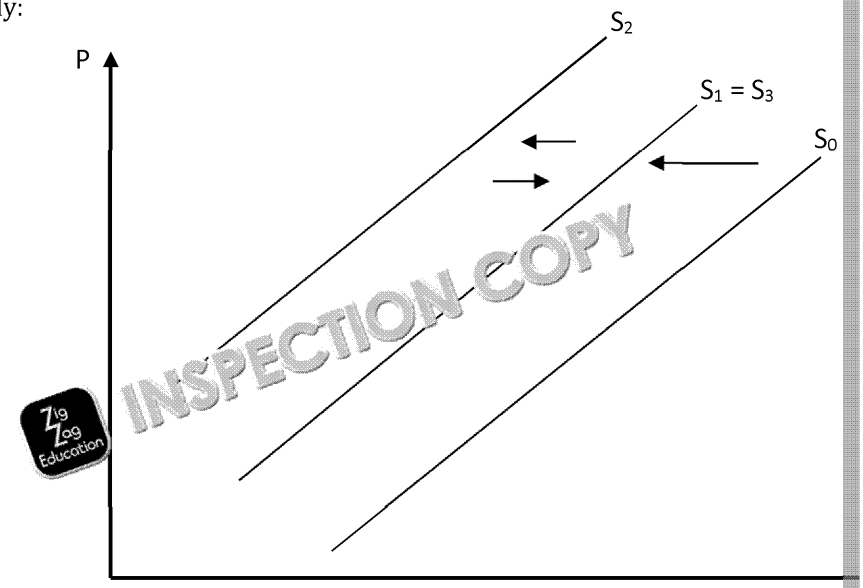
[1 mark for identifying the direction of the shift; 2 additional marks for a strong explanation, or 1 a a weaker argument that still conveys the correct meaning]

4. There is a lot of information in the extract that will affect the position of the supply curve in the traditional Californian farmers' produce. First, the price of almonds has incentivised traditional production from row crops to orchards. This is evidenced by the fact that the almond industry's increased from half a million pounds (lbs.) to approximately 2 billion pounds today. Therefore, t would be reflected by a *leftward* shift in the traditional market's supply curve as the number of f market decreases and shift production to the more profitable almond p

Moreover, there has been a drought in California for th fi years. Unfortunately for traditi when there are droughts they don't get alloca h water by the State because they don't ha during that period. Almond trees, how be fed water regardless of the environment – i allocated a huge 8% of the nti water resources. Therefore, traditional farmers that wis crops must spend mo rc sing water during these drought periods. This would increase production for traditio ners meaning at any given price for their produce they would be w less. Again, the supply curve has shifted left.

However, there is a little evidence that these farmers are getting more efficient. Technology redu costs by reducing purchases of excess inputs. This effect could (partially) offset the cost increase because of the Californian drought. Therefore, the adoption of new technology would shift the su right. The overall effect on the position of the supply curve will ultimately depend on whether th benefits of this technology outweigh the cost increases of the Californian drought. In the diagram represents the initial position of supply in the traditional produce marker, S_1 represents the pos have shifted towards almond production, S_2 is the position of the supply curve after the Californi traditional farmers, while S_3 is the movement after technology has been adopted. S_3 could be pla the diagram so long as it moves in the rightward direction – the magnitude of the shift depends judgement. **In this case it has been drawn such as if the adoption of technology has comple increases in the price of water.**

Graphically:



[2 marks for the diagram, plus 2 additional marks for the linking explanation]

5. (a) Price elasticity of supply (PES) is the sensitivity, or responsiveness, of suppl service's price level.

[2 marks for a clear explanation of PES; 1 mark for an explanation that is less general meaning]

(b) $$\text{PES} = \frac{\text{\% Change in the Quantity Supply}}{\text{\% Change in the Price}}$$

[2 marks for correct formula for PES; awar[illegible] mark if formula is defined percentage change; no marks if n[illegible] denominator are opposite to v

6. A music streaming servi[illegible] be almost perfectly *elastic* in the short-run. Thi service is set up[illegible] der will incur very few additional costs per unit, mainly

[1 mark[illegible]stic; 1 mark for explanation]

4.1.3.5–6 Price Determination in a Competitive Market

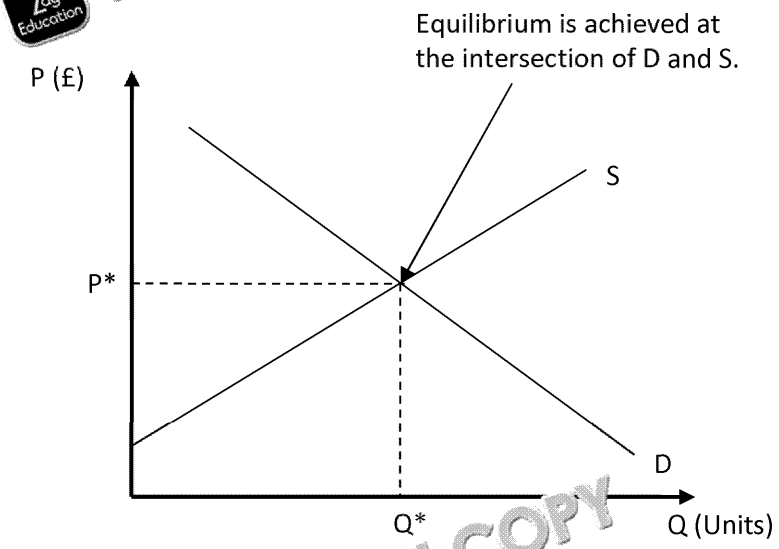
1. (a) A market is a place (real or nominal) where buyers and sellers interact to ex

[1 mark for correct definition]

(b) Market equilibrium refers to the situation in which the market price level is and supply are balanced – that is, at this single equilibrium price, the quanti *exactly* equals the quantity supplied by producers.

[1 mark for correct definition. Note, responses must involve the concept of a m students need to use the terminology]

(c)



[2 marks for correctly drawing a [illegible] and supply diagram (with correct la point of market equilibrium (i.e. the intersection of demand and supply); 1 ma levels of price and quantity, i.e. P and Q*)]*

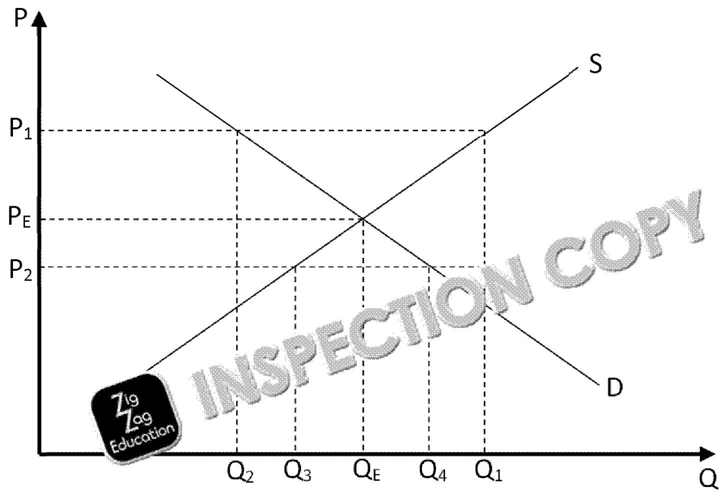
2. **C** – If de[illegible]creases – that is, a *leftward* shift – then the equilibrium market p contrac[illegible] supply (a movement down the supply curve).

[1 mark for correct response]

3.
- Initially, a demand shock brought about by a change in preferences for cago over supply at the initial price of P_1, which was originally determined by the
- However, at P_1 the market price will be below the market-clearing (equilibri determined by the intersection of the original supply curve, S_1, and the dem in demand, D_2.
- If demand exceeds supply, there are too many buyers chasing a limited num order to tempt suppliers to extend their supply, each buyer offers little mor Thus, the change in preferences of consumers is transmitted to producers. I there is a shortage of supply, and so know that they can afford to increase th order to improve profitability.
- This process is continued until eventually the price is bid up to the market-cle extension along the original supply curve, and a contraction along the new de necessarily a contraction in [illegible] because the increase in price will be too l they will reduce the [illegible]d – this is the 'rationing' function of prices. At P_2, balanced at [illegible] no excess of demand over supply – that is, the market ha

[Ma[illegible]4 marks. 3–4 marks for a strong, well-supported answer explaining forces will bring about microeconomic equilibrium for cagoules. 1–2 marks for process but lacking detail.]

4.



Equilibrium is *only* achieved at the intersection of a market's demand and suppl which demand exactly equals supply and there is no shortage or excess of either clearing' price. At P_E there is an associated equilibrium quantity of Q_E.

Disequilibrium occurs at *any* price other than the market-clearing price P_E. Diag price of P_1, which is greater than the market-clearing price P_E. At P_1 there will be and too few demanded/sold (Q_2) – i.e. the price is too high. Quantity Q_2Q_1 would too low at P_2 – fewer would be produced (Q_3) than demanded (Q_4). In this case, th as Q_3Q_4 simply wouldn't be produced.

[Up to 2 marks for accurately drawn diagram(s), including correctly labelled curve disequilibrium; 2 marks for a clear distinction between equilibrium and disequilib that is less clear but which conveys the general meaning]

5. If the price of Frisbees is P_1 this implies that the market is in disequilibrium beca clearing price of P*. At P_1 the supply of Frisbees is greater than the market clearin at some level less than Q* because consumers don't want to purchase as much as Intuitively, this makes sense: when prices are high firms tend to supply more in consumers demand less because of real income and substitution effects. Therefor excess supply they must reduce their price so that more of their product is consum any shortage price will stabilise at P* and the quantity at Q* where demand an

[1 mark for recognising that the market for Frisbees is in disequilibrium; 1 mark fo to fall to reach its equilibrium rate; 1 mark for explanation. Maximum 3 marks for

6. **C** – Joint demand refers to goods for which demand is interdependent, such that

[1 mark for correct response]

7. **A** – Composite demand refers to demand for an item that has multiple uses (e.g. plastic, generate energy, and power motor vehicles, etc., so its demand is a comp

[1 mark for correct response]

8. **A** – Competitive demand refers to the demand for goods that are in competition Coca-Cola are notorious competitors, so when the demand for Coca-Cola increase Pepsi we know that this reflects competitive demand.

[1 mark for correct response]

9. **B** – Derived demand: the demand for factor inputs is a form of derived dema demanded not because of their own merit, but for their ability to be converted into o

[1 mark for correct response]

10. **A** – Joint supply refers to a situation in which a firm produces a number of product production process – e.g. a firm might produce a by-product as part of the producti

[1 mark for correct response]

4.1.4 Production, Costs and Revenue

1. Figure 1 shows that there has been a marked difference in levels of productivity – hour – between the UK and Ireland from 2010 onwards. While the UK's producti Ireland's productivity has increased dramatically. Ireland's productivity in 2016 The UK's, however, is only 0.9% greater.

   Labour productivity has an effect on unit labour [illegible] by altering the total o of labour input. Therefore, Ireland's ULC in 2016 should be lower than the UK's, labour input more efficiently. Ultimately this means that Ireland's cost of produc average and so this should [illegible] the price of Irish products relative to the UK that Irish products should be cheaper than UK products because its costs of prod output [illegible] firms more competitive in international markets than UK firms, ar in expo[illegible]uld deteriorate on the basis of this information.

   However, an important problem in this analysis is that the effect will depend on t and the UK. Since ULC is measured by the total cost of labour divided by total out will depend on the initial total cost of labour. If Ireland's labour cost was signific with then it is not guaranteed that an increase in productivity will make Irish ex the UK's.

   [Maximum 4 marks for a clear analysis of the impact on the UK of changing levels o for an adequate analysis, might be underdeveloped or lacking in detail]

2. Specialisation occurs when an individual, business, or nation state concentrates t production of a single, or limited number, of good(s).

   [1 mark for correct answer]

3. From Table 1 it is immediately obvious that Adam is [illegible] better at producing bo fact, if Adam dedicated himself to producing vans he could make 36 per annum, v dedicated his production to cars then he could also produce 36 per annum, whic maximum output.

   It might seem like there is little reason for Adam to trade with Karl given that Ad produc[illegible] both vans and cars. However, this doesn't mean that there cannot b trade be[illegible] these individuals.

   It's important to note that Adam can only specialise in one *or* the other, and focus that Adam necessarily has to sacrifice some cars. It would be in everyone's best i specialise in the thing that they are better at.

   If Adam wants to produce one more car, he must sacrifice one van, and *vice versa* more car he must sacrifice two vans, and to produce one more van he must sacri opportunity cost (in terms of vans) of producing cars is lower than that of Karl's in car production. Karl should specialise in producing vans because his opportun

   If Adam and Karl specialise and trade, they will both be better off – producing 36 situation without specialisation and trade because *more* of both goods can be pr

   [1 mark for identifying that both Adam and Karl will [illegible]te off with specialisati for explanation]

4. Adam Smith's observation [illegible] that through specialisation and *division of labour* if workers hadn't sp[illegible]a[illegible]e

   Specia[illegible] improves productivity because workers are able to practise and b of tasks [illegible]er than *all* tasks. Specialised workers might also develop specialised is also no time wasted moving between different parts of the production process. division of labour can allow more to be produced given limited factor inputs had

It is clear, therefore, that specialisation can address the basic economic problem to satisfy a *greater* number of infinite wants – e.g. specialisation in a pin factory than 100 pins being made using the same factor inputs.

However, specialisation could result in lower productivity for a number of reaso bored and/or demotivated and their productivity would decline as a result. Seco highly specialised a problem at one stage of production could prevent any furthe Therefore, specialisation could also exacerbate the basic economic problem if no

[Maximum 4 marks. 1 mark for identifying that a statement that specialisation impro a clear explanation including an example against the first point]

5. Primarily, in a barter economy trade *only* occurs if there is a *double coincidence o* if each individual is offering the other individual something that they want. Mone is a standardised medium of exchange that serves as an intermediary for trade. M which further facilitates trade because in a barter system it wouldn't be possible it for five chickens.

Note that a number of different responses that focus on the functions (and/or ch acceptable. However, students must reflect on how these functions facilitate trad

[2 marks for a clear explanation of how money facilitates trade compared to a bart explanation that is less clear but which conveys the general meaning]

6. In economics, the short- and long-run are distinguished in terms of the variabilit short-run it is said that the quantity of *at least one* factor of production is fixed, w are free to be varied by the firm. However, in the long-run *all* factors of productio the long-run firms are more 'flexible' and can adjust to changing market conditio production such as labour is more variable than capital – e.g. firms can fairly easi workforce to work overtime, but it's far more difficult to build a new factory in th

[2 marks for a clear distinction between the short- and long-run; 1 mark for a distin conveys the general meaning]

7. Economies of scale are the process through which increasing the scale of pr lower p t c

[2 mark clear explanation of economies of scale; 1 mark for an explanation tha general meaning]

8. **B** – Internal economies of scale are those economies of scale that are achieved th expansion. Conversely, external economies of scale refers to economies of scale a an entire industry and so **A** cannot be correct. **C** and **D** refer to diseconomies of s unit costs as production scales up.

[1 mark for correct answer]

9. Internal economies of scale can include: *technical economies of scale; purchasing economies of scale; financial economies of scale; marketing economies of scale; risk network economies of scale.*

Purchasing Economies of Scale (EoS), for instance, refer to businesses being abl discounted prices because it is purchasing such vast quantities in order to maint utilities are often discounted for businesses that need much electricity or water; items at reduced price that they buy.

[1 mark identifying an appropriate cause of internal economies of scale; 1 mark marks justification of an external economy of scale]

10. (a) External economies of scale are those economies of scale that are achieved th an entire industry, rather than the individual firm, and the expansion tends to

[2 marks for a clear explanation of external economies of scale; 1 mark for an conveys the general meaning]

(b) Examples of external economies of scale include, but are not limited to: *infr specific industries (both transport and communication); provision of research provision of industry-specific training; relocation of suppliers to better service economies (e.g. clustering).*

Infrastructure investments, for instance, might be provided by the governm expanding industry. It should be clear that *all* firms in the industry will bene brought about by this investment.

[1 mark for identifying an appropri[illegible] external economies of scale; 1 no marks for identification [illegible] economy of scale]

11. Primarily, econo[illegible] benefits a business because it helps them decrease Firms [illegible]re[illegible]e, positioned to make higher profits when their costs decrease Firms m[illegible]so be able to invest this profit into research and development and allows them to produce even more efficiently, thus 'multiplying' this effect. Comp the same level of economies of scale will lag behind those that are positioned to i make investments in advertising and marketing their product too, thus increasin contributing to profit. However, economies of scale could lead to lower quality pr production process properly.

[Maximum 4 marks. 2 marks each for correctly identifying two benefits of EoS to a reason/explanation of each benefit.]

12. First, note that a firm's average revenue is simply total revenue divided by outpu interpreted as the (average) price per unit of output. Second, remember that a fi relationship between price and quantity demanded over a range of output. Notic are exactly the same in the table; therefore, a firm's demand and average revenue both show an inverse relationship between price and quantity.

[2 marks for a clear explanation of the relationship [illegible]n a firm's average reven for an explanation that is less clear but which [illegible]e general meaning]